January 16, 2025

To: Amy Hanson, FAA Environmental Specialist,

SpaceX EA, c/o ICF, 1902 Reston Metro Plaza

Reston, VA 20190,

Attn: **Docket No. FAA-2024-2006**: Spacex

Starship Revised Draft Environmental

Assessment

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Dear Public Officials:

Thank you for the opportunity to provide comments on the Spacex Starship Revised Draft Environmental Assessment.

While I appreciate the work that has gone into the Revised Draft, I believe that it has serious defects and that a full EIS is necessary and a broader range of alternatives should be considered. One such consideration should be whether any license for such operations should issued to a private corporation for such major and potentially catastrophic actions.

In addition to the "No Action" alternative there should be a "Nationalize Spacex" Alternative in which the federal government assumes control over the Spacex program as a necessary antecedent to National and Environmental Security, and to control the dangerous prospect of the American space program being dominated by a foreign born national who by some assessments, appears to have the potential to be not right in the head, especially since a biographer of Elon Musk has recently warned that the billionaire may "endanger us all" as worries about his health continue to mount.¹

¹ See The Economic Times, *Elon Musk's biographer warns the billionaire is "going mad" and could "endanger us all", says he is "deeply unwell"* available online at

https://economictimes.indiatimes.com/news/international/us/elon-musks-biographer-warns-the-billionaire-isgoing-mad-and-could-endanger-us-all-says-he-is-deeply-unwell/articleshow/117130551.cms?from=mdr

This Comment is based in part upon the allegations in the Complaint in the D. C. Circuit Civil Case No. 23-1204 filed by the Center for Biological Diversity². These allegations, which are incorporated into this comment by reference, include the claim that:

Defendants violated NEPA by failing to prepare an Environmental Impact Statement, instead relying on inadequate and unproven mitigation to find that launching the largest rockets known to humankind—which are known to explode and adversely affect surrounding lands that provide essential habitat for migratory birds, including federally protected species—would not have significant environmental impacts.

These concerns as to the issuance of the original License are even more critical to the greatly expanded License that is currently being contemplated in the Revised EA without the EIS that should be required for a project with the potential for catastrophic impacts to the environment, and the potential for impacts on the Pacific Ocean, the areas near Hawaii, and the sensitive environment and cultural areas of the Hawaiian Islands themselves, Including the Big Island where this commentator owns land and employs the Ocean and shorelines for recreation.

In the Revised EA, it Appears that the FAA has again repeated the mistakes of its previous determination, but on a larger and more dangerous scale, in that:

"Defendants (again) failed to take the requisite "hard look" at the environmental impacts of the SpaceX launch program as NEPA requires, including from light, heat, and environmental pollution, as well as risk of wildfires, the impacts of closures on the community, and the launch program's contribution to climate change, and that the FAA failed to consider a reasonable range of alternatives.

Another omission is the failure of the FAA to include a "Worst Case Scenario" particularly in light of the many explosions of Spacex Rockets that have taken place both on the ground and in midair. Outrageously, this omission is combined with the

² Available online at https://biologicaldiversity.org/programs/biodiversity/pdfs/12-15-2023-Supplemental-SpaceX-Complaint.pdf

circumstance that *the exact number of explosions is not publicly disclosed*, making any type of accurate assessment impossible³. https://www.mountbonnell.info/elons-austin/examining-spacex-launch-failures-under-elon-musk

The Falcon 9, Falcon Heavy, Starship and Superheavy variants have all experienced what Spacex refers to as "rapid unscheduled disassembly" events, and Spacex considers these explosions as merely part of SpaceX's iterative design process. These are the heaviest Rockets ever produced, and when they experience "rapid unscheduled disassembly" there is catastrophic damage to the environment⁴. This potential has not been adequately assessed and is of a magnitude that requires an EIS.

Other unaddressed potentials for significant adverse impacts are present in the unknown and unprecedented impacts upon the ionosphere⁵ that are the result of explosions of these monstrosities in space, and in the unassessed potential for these devices, in a worst case scenario, to explode or crash into the Pacific Ocean or the Hawaiian Islands themselves. Instead, the authors of this Revised Environmental Assessment appear to have abandoned the CEQ Regulations and instead took a page from the celebrated satirist Tom Lehrer:

"Vunce ze rockets are up, who cares vere zey come down? That's not my department!, " says Wernher von Braun⁶.

Significantly, The first test flight on April 20, 2023, which aimed for a Pacific landing, ended in a <u>catastrophic explosion</u> shortly after liftoff over the launch pad at Boca Chica, Texas, scattering debris across sensitive wetlands and <u>wildlife habitats</u>. The

³ See: *Examining SpaceX Launch Failures Under Elon Musk*, Available online at https://www.mountbonnell.info/elons-austin/examining-spacex-launch-failures-under-elon-musk

⁴ See: *SpaceX Blast Left Officials in Disbelief Over Environmental Damage* https://www.bloomberg.com/news/features/2023-08-25/elon-musk-s-spacex-explosion-left-major-debris-after-starship-rocket-launch

⁵ See 'Catastrophic' SpaceX Starship explosion tore a hole in the atmosphere last year in 1st-of-its-kind event, Russian scientists reveal available online at https://www.livescience.com/space/space-exploration/catastrophic-spacex-starship-explosion-tore-a-hole-in-the-atmosphere-last-year-in-1st-of-its-kind-event-russian-scientists-reveal

⁶ That was the Year that was, Wehrer Von Braun:, Reprise Records, 1965

blast also created a shockwave that shattered windows in nearby homes and launched a

cloud of dust and particulate matter that blanketed the surrounding community.⁷

The upper stage of Starship is designed to crash into designated landing zones in the ocean, some near Hawaii, where it will be intentionally exploded on impact to minimize retrieval risks and costs. Yet no assessment has been done on the expansion of the blast zones to the sensitive areas around the Hawaiian islands, or of the worst case scenario where a huge explosion results on one of the Hawaiian islands.

No adequate assessment has been done at any stage in the process in regard to the potential impacts of the expanded Hawaiian crash zones upon the sensitive oceanic and island environment and the unique cultural sites revered by both native Hawaiians and Haoles alike.

In Conclusion, the expansion of this Licensing program to a private company with a history of flouting the environmental laws poses an immense and un-assessed potential for catastrophic impacts over a large swath of the land, water and atmosphere. The potential for distribution of toxic and radioactive materials from the rockets, their stages, and their payloads has not been addressed. Nor has the potential for impacts to the unique and sensitive environment of the Hawaiian Islands from repeated explosions in their near vicinity. No worst case scenarios have been considered, and the entire process resembles a rubber stamp for a corporation run by a dangerous oligarch with no concern for the environmental laws⁸ or the average citizen.

Under the clear letter of NEPA and the CEQ Regulations that implement it, a full EIS should be required for the proposed Spacex License Expansion.

Done January 16, 2025.

<u>s/*Arthur West*</u> Arthur West

⁷ See; *Public Should Weigh In On Elon Musk's SpaceX Plans To Splash Down Near Hawai'i*, available omline at https://www.civilbeat.org/2025/01/public-should-weigh-in-on-spacexs-plans-to-splash-down-near-hawai'i/

⁸ See: *Spacex violated Environmental Rules by Dumping Toxic waste*, available online at https://futurism.com/the-byte/spacex-environment-toxic-wastewater